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PICH, PON	NOREAY
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Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)		
Office Action Summary	10/055,767	MARIN ET AL.		
	Examiner	Art Unit		
	Ponnoreay Pich	2135		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	mely filed ys will be considered timely. the mailing date of this communication. ED (35 U.S.C. § 133).		
Status				
1)⊠ Responsive to communication(s) filed on <u>23 January 2002</u> .				
•	action is non-final.			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims				
4) Claim(s) 1-19 is/are pending in the application 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 1-19 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o	wn from consideration.			
Application Papers				
9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 23 January 2002 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex	: a)⊠ accepted or b)⊡ objected drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	ion No ed in this National Stage		
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5/2002 and 6/2002	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:			

Application/Control Number: 10/055,767

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DETAILED ACTION

Claims 1-19 have been examined and are pending.

Information Disclosure Statement

The IDS submitted by the applicant have been considered.

Specification

The disclosure is objected to because of the following informalities:

- 1. On page 8, block 74 is referred to as the predefined timeout period. The examiner believes applicant meant to recite block 72 instead.
- 2. The use of the trademarks ZONEALARM PRO, ZONEALARM, ZONELABS, MACAFEE FIREWALL, NETWORK ASSOCIATES, NORTON INTERNET SECURITY 2002, SYMANTIC CORP, BLACKICE DEFENDER, DEFENDER NETWORK ICE CORPORATION, WINDOWS, WINDOWS NT, and MICROSOFT WINDOWS have been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

On page 12, line 7, the examiner believes the "is" before "has" should be deleted.
 Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3-6, 10, 12, and 14-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- 1. Claim 3 recites "the network card" on line 3, which lacks antecedent basis. The examiner notes that a computer is known to be able to contain more than one network cards, so it is unclear to which network card the recited claim is referring.
- 2. As per claim 4, it is unclear to which step of obtaining an address is being referred.
- 3. Claim 12 recites "the network card" on line 4, which lacks antecedent basis. The examiner notes that a computer is known to be able to contain more than one network cards, so it is unclear to which network card the recited claim is referring.
- 4. As per claim 12, the limitation recited in lines 13-14 does not make any sense.
 The examiner respectfully asks that the applicant double-check the wording of that limitation.
- 5. As per claims 14-17, applicant recites "a Microsoft Windows operating system."
 The examiner asserts that the use of this trademark by the applicant in the claim language renders the claims indefinite as what "Microsoft Windows" is referring to changes frequently.
- 6. As per claims 15-17, the use of the trademark Windows NT also renders the claims indefinite as there are many different versions of Windows NT. Even specifying Windows NT 4.0 as recited in claims 16-17 still does not make the

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claimed invention any clearer as there are also many different versions of Windows NT 4.0 which depends on such things as service packs and patches used on the operating system.

7. Any claims not specifically addressed are rejected by virtue of dependency.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 19 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 19:

Claim 19 as recited is directed to software code stored on a computer readable medium. The claim is directed towards non-functional descriptive material and is non-statutory.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 8-11, and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Killian (US 6,064,671).

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Claims 1, 18, and 19:

Killian discloses a method as per claim 1 for securing a computer connected to an insecure network when the computer is not utilizing the insecure network, wherein the computer is installed with a program managing the connection with the insecure network, the method comprising the steps of:

- 1. Determining whether the computer is active (col 20, lines 12-19 and col 21, lines 52-64).
- 2. Deactivating the computer from the insecure network when it is determined that the computer is inactive (col 21, lines 24-29 and col 25, lines 1-16).
- 3. Waiting for a predetermined time period to repeat the method (col 21, lines 24-29).

Claim 18 is substantially similar to claim 1 except it refers to a system with means for carrying out the steps of the method recited in claim 1. Claim 19 recites a computer program product comprising a computer readable code stored on a computer readable medium that, when executed, the computer program product causes a computer to perform the method recited in claim 1.

Claim 3:

Killian further discloses:

- 1. Obtaining an address for the network card (col 13, lines 1-10).
- 2. Obtaining an address for an interface connected to the insecure network using the obtained address of the network card (col 13, lines 1-10).

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3. Obtaining the status of the obtained address of the interface (col 17, lines 20-23).

Claim 8:

Killian further discloses determining whether there is a network reactivation request and reactivating the computer on the insecure network when there is a network reactivation request (Fig 20 and col 21, lines 52-64).

Claim 9:

Killian further discloses determining whether there is a network deactivation request and deactivating the computer from the insecure network when there is a network deactivation request (Fig 19; col 21, lines 24-29; and col 22, lines 42-63).

Claim 10:

Killian further discloses determining whether the obtained address of the interface connected to the insecure network has an active status and waiting for a predefined time period to repeat the method when the obtained address of the interface has a non-active status (col 21, lines 24-29 and lines 52-64).

Claim 11:

Killian further discloses determining whether there is any active network processes currently running via the insecure network when it is determined that the computer is active and deactivating the computer from the insecure network when it is determined that there is no active network process currently running via the insecure network (col 21, lines 24-29 and col 25, lines 1-16).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Killian (US 6,064,671) in view of Dev et al (US 5,295,244).

Claim 2:

Killian does not explicitly disclose the step of displaying the current status of the insecure network on the computer. However, the examiner notes that it was common practice in the art at the time the applicant's invention was made to display the current status of the network that a computer is connected to on the computer (i.e. for Windows based system, this was usually done via an icon on the task tray). This limitation is further disclosed by Dev (col 2, lines 17-29). In light of this, it would have been obvious to one of ordinary skill to have modified Killian's invention according to the limitation recited in claim 2. One of ordinary skill would have been motivated to do so as Dev discloses that in network management systems (such as the one disclosed by Killian), the way that information is presented to a user is important (col 2, lines 17-19). A display on the computer would clearly identify the network entity that the computer is connected to for the user.

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Claims 4-7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Killian (US 6,064,671).

Claim 4:

Killian does not explicitly disclose wherein the step of obtaining an address further comprises the steps of:

- Initializing any sockets support in the program managing the insecure connection.
- Loading a driver having an object identifier of the program managing the insecure connection.
- 3. Obtaining an address for the initialization function and an address for the query function from the program.
- 4. Calling the initializing function to initialize the driver.

However, the examiner submits that the above-recited steps are the steps necessary to obtain an address in any type of system connected to a network. Further, Killian discloses initializing sockets to make a connection between the individual computational entries in the application layer of TCP (col 14, line 51-col 15, line 11). Killian also discloses that whether each socket is active or not is checked (col 15, line 60-col 16, line 23). The examiner submits that these teachings by Killian read on the limitations recited in claim 4 as the sockets cannot be initialized to active unless an address is obtained.

Claim 5:

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Killian further discloses determining a total number of interface(s) using the obtained address of the network card and storing the obtained total number of interface(s) in temporary memory (Figures 10 and 12 and col 13, lines 1-40). Note that the routing tables seen in Figures 10 and 12 could not have been built if the total number of interfaces(s) was not determined.

Claim 6:

Killian further discloses wherein said step of obtaining the status of each obtained address of the interface further comprises the steps of reading the status of the obtained address of the interface and saving the obtained address of the interface with the read status to memory (Fig 17 and col 17, lines 20-23).

Claim 7:

Killian does not explicitly discloses wherein said step of deactivating the computer from the insecure network further comprises the step of setting each obtained address of the interface to an inactive status. However, this limitation is obvious to Killian's invention, as the step of deactivating the computer from the insecure network requires that the AUTOCONNECT_DEAMON automatically disconnect network connections (col 21, lines 24-29). Further, Killian's invention tests for inactive physical interfaces (col 21, lines 52-56). It is obvious that for Killian's invention to be able to know whether or not a physical interface is active, the address associated with that interface must be flagged as active or inactive in some manner.

Claim 12:

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Killian does not explicitly disclose wherein said step of determining whether there is any active network processing currently running further comprises the steps of:

- 1. Obtaining an address for the network card.
- 2. Obtaining an address for an interface connected to the insecure network using the obtained address of the network card.
- Reading an old number of received and transmitted bytes over the obtained address of the interface.
- Changing the obtained address of the interface to an address for obtaining the number of bytes received.
- 5. Reading the number of bytes received.
- 6. Saving the read number of bytes received as a new number.
- 7. The obtained address of the interface to an address for obtaining the number of bytes transmitted.
- 8. Reading the number of bytes transmitted.
- 9. Saving the read number of bytes transmitted as a new number.
- 10. Determining whether the old numbers of received and transmitted bytes equal to the new numbers of received and transmitted bytes.
- 11. Returning a determination that an active network process is currently active when the old numbers do not equal the new numbers.
- 12. Returning a determination that no active network process is currently running when the old numbers equal the new numbers.

However, the examiner asserts that the above-recited limitations read on examining a log to determine how many bytes of packets have been transmitted from and received at a network interface or card. It is obvious that if the log of received and transmitted bytes do not indicate a change in number that the there are no active network process running. If the number of logged packet changes, then there are active network processes running. This logging process is the part of any TCP protocol stack as disclosed by Killian (col 3, lines 25-36). As also discussed by Killian in the cited passage, TCP must examine this log for error correction purposes. It would have been obvious to one of ordinary skill in the art to explicitly use the steps recited in claim 12 to determine if any active network processing are currently running as it would allow the session and transport layer of TCP to determine if there are any errors in packet transmission (col 3, lines 25-36).

Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Killian (US 6,064,671) in view of Hayton (US 6,799,209).

Claim 13:

Killian does not disclose determining whether the computer is active is performed by a step of determining whether the screen saver is activated on the computer.

However, Hayton discloses this limitation (col 3, lines 42-48; col 4, lines 5-10 and lines 39-65). It would have been obvious to one of ordinary skill in the art to have modified Killian's invention according to the limitations recited in claim 13 in light of Hayton's teachings. One of ordinary skill would have been motivated to do so as Hayton

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discloses that monitoring the screen saver would allow one to determine if a user is inactive on the computer (col 4, lines 56-64). A user being inactive increases the chances of the computer being inactive also.

Claim 14:

Killian does not disclose wherein said step of determining whether the screen saver is activated further comprises the step of determining the current version of a Microsoft Windows operating system installed on the computer. However, this limitation is obvious to the combination invention of Killian and Hayton. Hayton discloses that to determine if the screen saver is activated, the OS version must be determined as the mechanism to detect the screensaver initialization is specific to the operating system (col 4, lines 39-65).

Claims 15-17:

Killian and Hayton discloses all the limitations of claim 14. Killian does not explicitly disclose the limitations as recited in claims 15-17. However, the limitations as recited in these claims are the steps necessary to determine if a screen saver is activated depending on the current version of the operating system on the computer. As Hayton discloses that the steps to determine if a screen saver is activated is OS dependent (col 4, lines 39-65), the steps as recited in claims 15-17 are obvious to the combination invention of Killian and Hayton. There are no other ways of making this determination for each type of operating system except via the recited steps in claims 15-17.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ponnoreay Pich whose telephone number is 571-272-7962. The examiner can normally be reached on 8:00am-4:30pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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